

# Nika

## PROJECT: GEAR5

Group 10

**Team Leader:**

Ralph Robes, N01410324

**Members:**

Elijah Tanimowo, N01433560

Francisco Santos, N01423860

Pradeep Singh, N00975892

# Table Of Contents

<b>Our Project</b>	<b>3</b>
Student Names & IDs	3
Github Repo Link	3
Credentials	3
<b>Sprint</b>	<b>4</b>
Sprint Goals	4
Sprint Dashboard	4
Gantt Chart	5
Daily Stand-up	7
Table	7
Sprint Retrospective	11
<b>System Context Diagram (C4 Model)</b>	<b>12</b>
<b>Design</b>	<b>15</b>
Principles	15
Design Patterns	15
<b>Coding Work Progress</b>	<b>16</b>
Runtime Permission	16
Customer Review Screen Storage	17

## Our Project

Our project aims to create a retro gaming device that integrates the past and present in an all in one system that users can experience. This system can be played physically via console and wireless through our mobile app. Our app allows users to share/store information via the cloud and access virtual currency as tokens to play as if it were an arcade.

### Student Names & IDs

Name	Id	Signature	Effort
Ralph Robes	N01410324	<i>Ralph Robes</i>	100%
Francisco Santos	N01423860	<i>Francisco Santos</i>	100%
Pradeep Singh	N00975892	<i>Pradeep Singh</i>	100%
Elijah Tanimowo	N01433560	<i>Elijah Tanimowo</i>	100%

### Github Repo Link

<https://github.com/RalphRobes0324/Nika.git>

### Credentials

Username: admin

Password: admin

# Sprint

## Sprint Goals

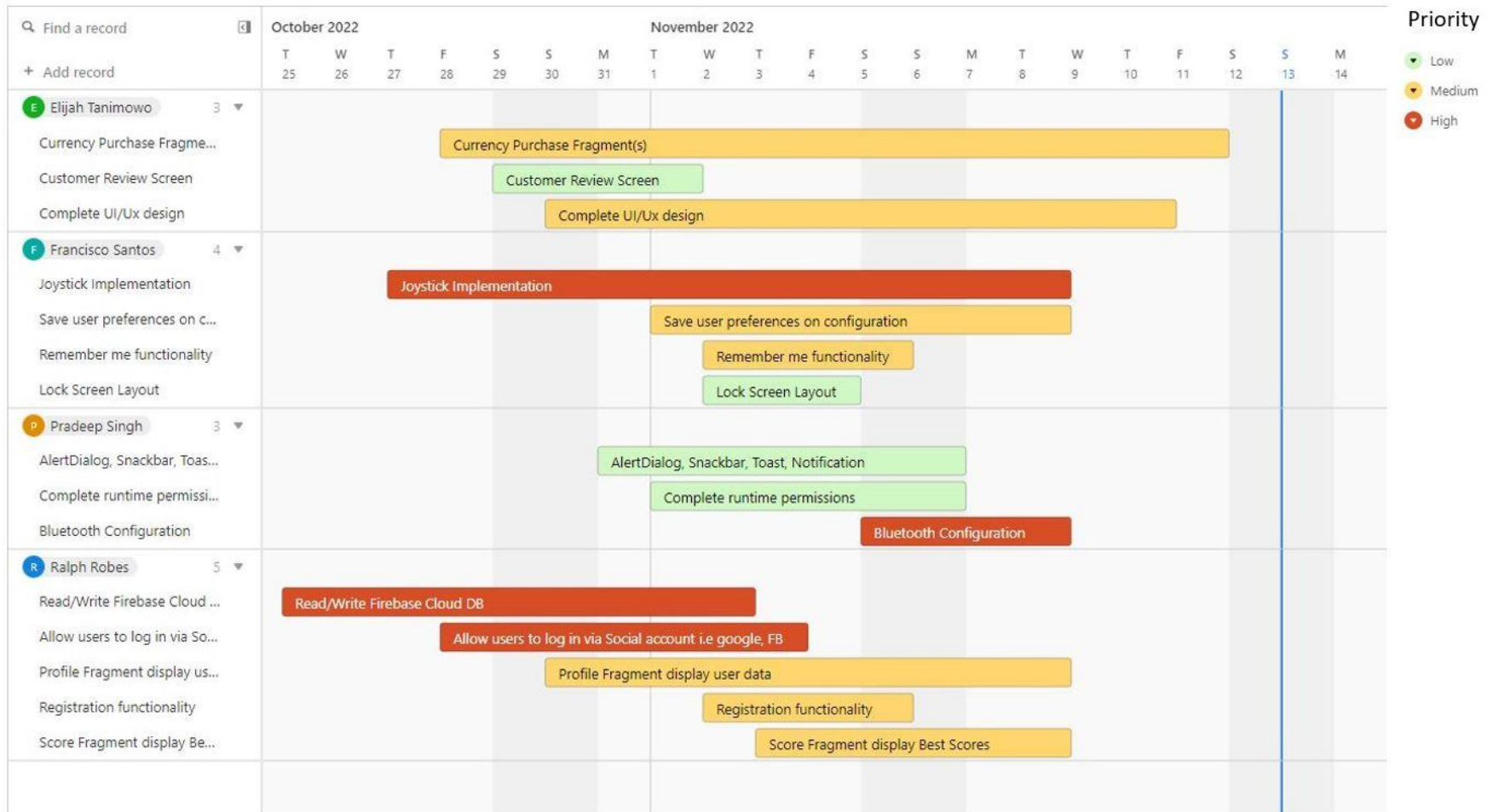
- Create a review page
- Allow the user to create and login to an account
- Allow the user to login with google
- Add joystick functionality
- Add functionality to the settings fragment so user can modify to their preferences
- Update our backgrounds
- Update the menus
- Add animations to the splash screen

## Sprint Dashboard

The dashboard displays four columns of tasks, each representing a story. Each task card includes a title, priority, due date, and status.

Story	Task	Priority	Due Date	Status
Story 1: Provide a way for users to give feedback and improve user experience	Task 1: implement star rating (Medium)	High	Oct 28 - Oct 31	ET
	Task 2: implement user comment/feedback (Medium)	High	Oct 29 - Nov 6	ET
	Task 3: allow user to provide phone number (Small)	High	Oct 29 - Nov 4	ET
	Task 4: allow user to provide email (Small)	High	Oct 28 - Oct 31	ET
	Task 5: allow user to provide name (Small)	High	Oct 29 - Oct 31	ET
Story 2: Save user information to a database so that the user can seamlessly switch devices and allow them to use other account formats	Task 1: Save login info to firebase (Large)	High	Oct 25 - Nov 2	RR
	Task 2: Save review to firebase (Medium)	High	Nov 11 - Nov 13	RR
	Task 3: Save balance to firebase (Medium)	High	Nov 12 - Nov 13	RR
	Task 4: Implement Google sign in (Large)	High	Oct 28 - Nov 3	RR
	Task 5: Allow user to register new account with erasing old one, login and register options and stores to firebase separately (Large)	High	Nov 2 - Nov 5	RR
Story 3: Provide user with the ability to customize app to their preferences, thus improving their experience	Task 1: Implement ability to switch profile picture (Small)	High	Oct 22 - Oct 24	FS, PS
	Task 2: Allow user to change joystick colour, using user preferences (Medium)	High	Oct 31 - Nov 6	FS
	Task 3: Allow user to change button colour, using shared preferences (Large)	High	Oct 24 - Oct 29	FS
	Task 4: Allow user to lock the app to portrait (Medium)	High	Oct 26 - Oct 30	FS
	Task 5: Allow user to mute the app (Medium)	High	Nov 9 - Nov 11	FS
Story 4: Improve the UI to give the user a better overall experience with the app	Task 1: Change backgrounds to match fragment themes (Small)	High	Oct 30 - Nov 10	PS
	Task 2: Change font style to better represent the app (Small)	High	Nov 7 - Nov 9	PS
	Task 3: Change colours to match the app (Small)	High	Nov 1 - Nov 3	PS
	Task 4: Add screens to add a better flow to the app (Large)	High	Oct 29 - Nov 10	ET, FS, PS, RR
	Task 5: Improve menu navigation to make everything clearer for the user (Medium)	High	Nov 4 - Nov 6	PS

## Gantt Chart

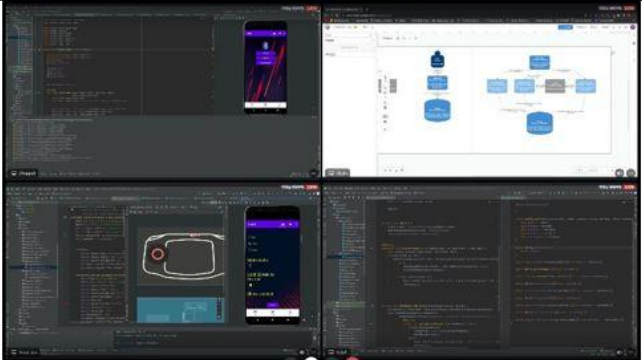
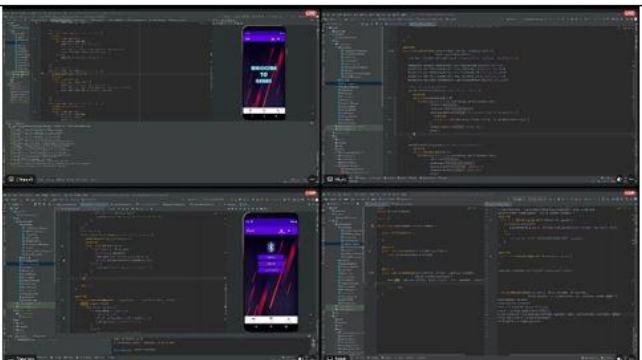
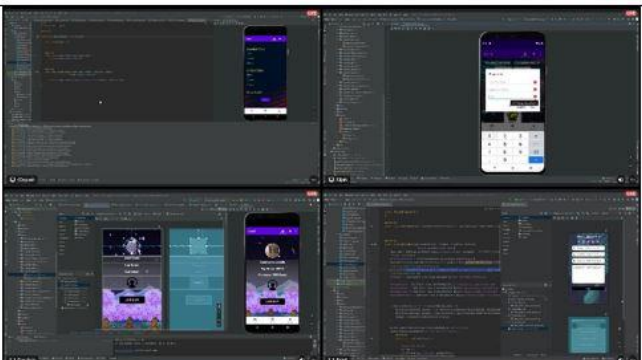


## Tasks/Priority Status

<input type="checkbox"/>	A Task	Assigned	Priority	Start date	End date	Status
1	Read/Write Firebase Cloud DB	Ralph Robes	High	25 October, 2022	2 November, 2022	Done
2	Allow users to log in via Social account i.e google, FB	Ralph Robes	High	28 October, 2022	3 November, 2022	Done
3	Joystick Implementation	Francisco Santos	High	27 October, 2022	8 November, 2022	Done
4	Bluetooth Configuration	Pradeep Singh	High	5 November, 2022	8 November, 2022	Done
5	Currency Purchase Fragment(s)	Elijah Tanimowo	Medium	28 October, 2022	11 November, 2022	Done
6	Complete UI/Ux design	Elijah Tanimowo	Medium	30 October, 2022	10 November, 2022	Done
7	Profile Fragment display user data	Ralph Robes	Medium	30 October, 2022	8 November, 2022	Done
8	Score Fragment display Best Scores	Ralph Robes	Medium	3 November, 2022	8 November, 2022	Done
9	Save user preferences on configuration	Francisco Santos	Medium	1 November, 2022	8 November, 2022	Done
10	Registration functionality	Ralph Robes	Medium	2 November, 2022	5 November, 2022	Done
11	Remember me functionality	Francisco Santos	Medium	2 November, 2022	5 November, 2022	Done
12	AlertDialog, Snackbar, Toast, Notification	Pradeep Singh	Low	31 October, 2022	6 November, 2022	Done
13	Complete runtime permissions	Pradeep Singh	Low	1 November, 2022	6 November, 2022	Done
14	Lock Screen Layout	Francisco Santos	Low	2 November, 2022	4 November, 2022	Done
15	Customer Review Screen	Elijah Tanimowo	Low	29 October, 2022	1 November, 2022	Done





## Daily Stand-up

Table

Meeting	Outcome	Screenshot
<b>1</b> October 30 <sup>th</sup> ,2022	<ul style="list-style-type: none"> <li>Created FireBase DB</li> <li>Updated UI</li> <li>Finished sharedPreference Implementation</li> <li>Created C4 diagram</li> <li>Added List of tasks</li> <li>Redesign of Login/Register with functionality for resetting password</li> </ul>	
<b>2</b> November 8 <sup>th</sup> ,2022	<ul style="list-style-type: none"> <li>Added Review fragment with user rating functionality</li> <li>Updated functionality on Profile Fragment</li> <li>Bluetooth Fragment Created and implemented</li> <li>Allow users to log in Via Google</li> <li>Created Gantt Chart</li> <li>Updated Profile UI</li> </ul>	
<b>3</b> November 10 <sup>th</sup> ,2022	<ul style="list-style-type: none"> <li>Additional Features/Functionality added</li> <li>Implemented Notification functionality on Review Fragment</li> <li>Updated Currency via Firebase DB</li> <li>Redesigned UI</li> <li>Completed Balance/Payment Fragment</li> <li>Storing Data within FireBase (Payment, Review)</li> <li>Sprint Goals/Dashboard/Retrospective</li> </ul>	

## Daily Standup Sprint 1





Daily Standup - October - November 2022

Pradeep Singh 	Francisco Santos 	Ralph Robes 	Elijah Tanimowo 
<p>What did you work on yesterday?</p> <p>Saving photo on profile fragment from gallery.</p>	<p>What did you work on yesterday?</p> <p>UI Updates and generally making the App more user-friendly and modern</p>	<p>What did you work on yesterday?</p> <p>I rebuild Login and Registration of the app.</p>	<p>What did you work on yesterday?</p> <p>Creating fragments, icons and images to be used for various upcoming parts of the app.</p>
<p>What will you work on today?</p> <p>Change the layout and fonts for Profile Fragment.</p>	<p>What will you work on today?</p> <p>Joystick Implementation on Play Fragment</p>	<p>What will you work on today?</p> <p>Building Forgot password system in the App</p>	<p>What will you work on today?</p> <p>Created a review fragment that allows user to give comment, personal information and a star rating.</p>
<p>Any blockers?</p> <p>I could not get the picture to save, I'm having trouble trying to save not sure If I am converting the image from bitmap to string properly.</p>	<p>Any blockers?</p> <p>Issues implementing functionality to play fragment that would change joystick button color</p>	<p>Any blockers?</p> <p>Finding parent ID from a child ID</p>	<p>Any blockers?</p> <p>No blockers so far.</p>







## Daily Standup Sprint 2

Daily Standup - October - November 2022

Pradeep Singh 	Francisco Santos 	Ralph Robes 	Elijah Tanimowo 
<p>What did you work on yesterday?</p> <p>Implemented the bluetooth fragment and connectivity</p>	<p>What did you work on yesterday?</p> <p>Settings Fragment functionality and sharedPreferences</p>	<p>What did you work on yesterday?</p> <p>Completed Forgot Password and little bit of Google SignIn</p>	<p>What did you work on yesterday?</p> <p>Fixed up the review screen to look proper and send a toast message when the user clicks submit.</p>
<p>What will you work on today?</p> <p>Fixing errors within the Bluetooth code and add functionality to allow device to be discoverable</p>	<p>What will you work on today?</p> <p>Settings Fragment functionality and sharedPreferences</p>	<p>What will you work on today?</p> <p>Completing Google SignIn</p>	<p>What will you work on today?</p> <p>I will create the balance/currency screen so that the user may add to their personal balance with the in app currency.</p>
<p>Any blockers?</p> <p>Currently no blockers at the moment.</p>	<p>Any blockers?</p> <p>No issues relating to UI updates</p>	<p>Any blockers?</p> <p>Google Application won't appear on the app</p>	<p>Any blockers?</p> <p>Minor issues getting the formatting to look right.</p>

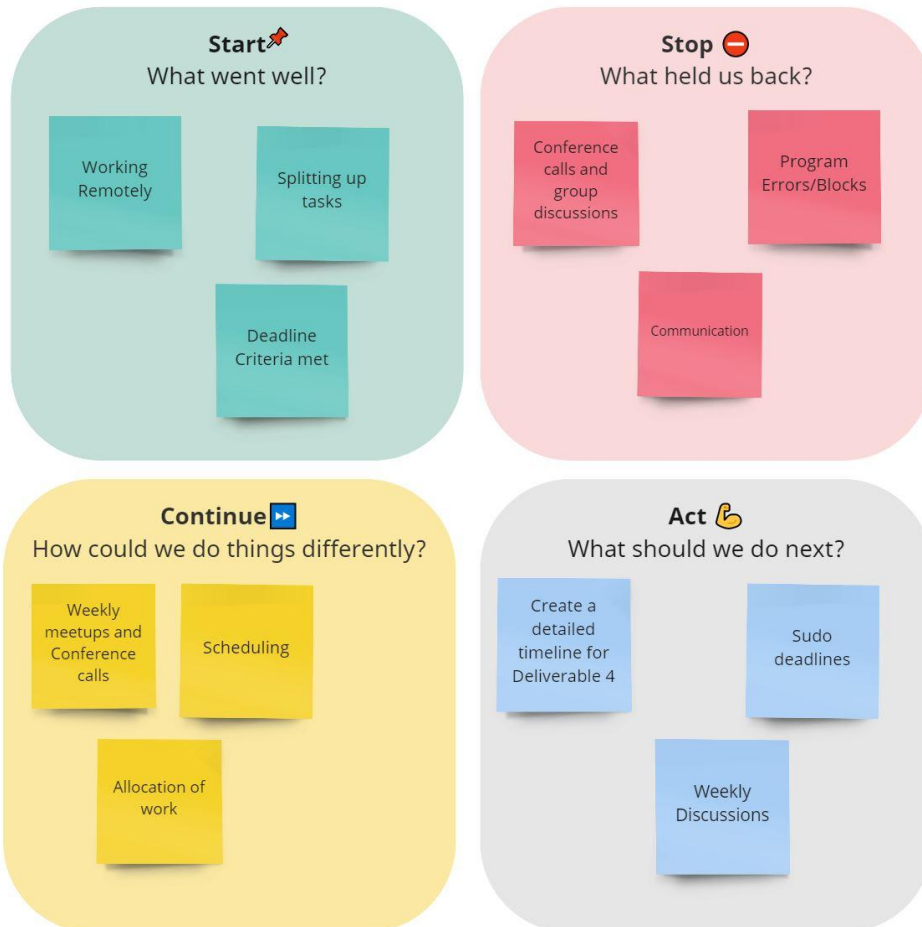
## Daily Standup Sprint 3

Daily Standup - October - November 2022

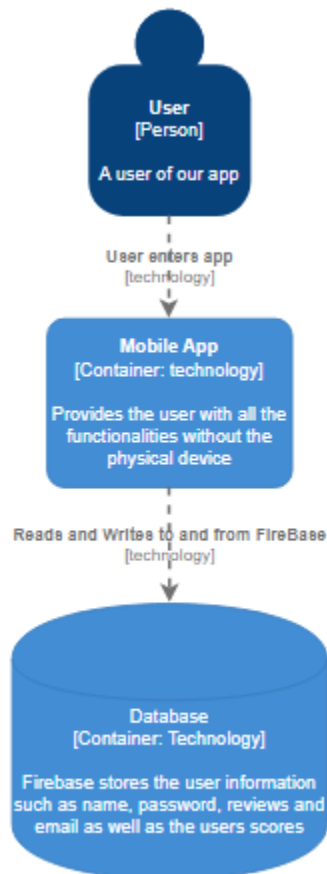
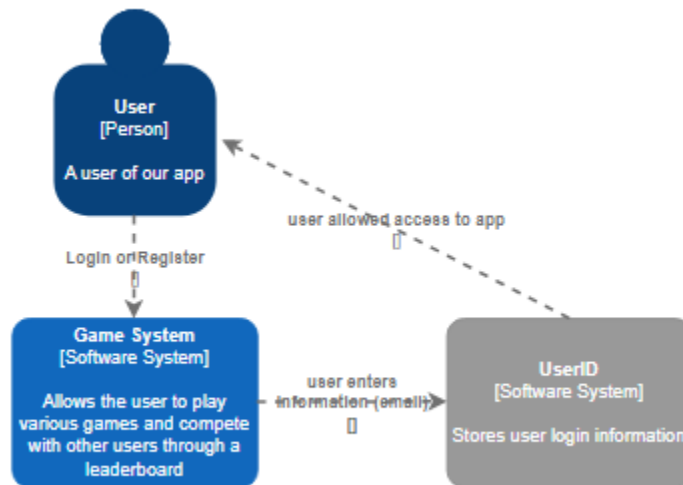
Pradeep Singh 	Francisco Santos 	Ralph Robes 	Elijah Tanimowo 
<p>What did you work on yesterday?</p> <p>Fixed runtime permissions on Bluetooth connection. Warnings were in effect due to lack of permissions.</p>	<p>What did you work on yesterday?</p> <p>Joystick Implementation on Play Fragment</p>	<p>What did you work on yesterday?</p> <p>Google Sign In and assisting redesigning Profile Fragment</p>	<p>What did you work on yesterday?</p> <p>Finished creating the general currency/balance screen, which allows the user to add currency and shows alert boxes.</p>
<p>What will you work on today?</p> <p>Add notification to app through Bluetooth connectivity to warn users about device visibility.</p>	<p>What will you work on today?</p> <p>Fixing up Errors and refining code, making it look nicer through UI updates and removing warnings</p>	<p>What will you work on today?</p> <p>Able to store user reviews in Firebase, able to update user currency if purchase and leaderboard</p>	<p>What will you work on today?</p> <p>I will convert various fragments and screens into landscape so that they comply with the requirement of having both portrait and landscape.</p>
<p>Any blockers?</p> <p>Intent and granting permissions is currently having issues, resolution is in progress.</p>	<p>Any blockers?</p> <p>No issues</p>	<p>Any blockers?</p> <p>Understanding how to organize user score.</p>	<p>Any blockers?</p> <p>No blockers so far.</p>

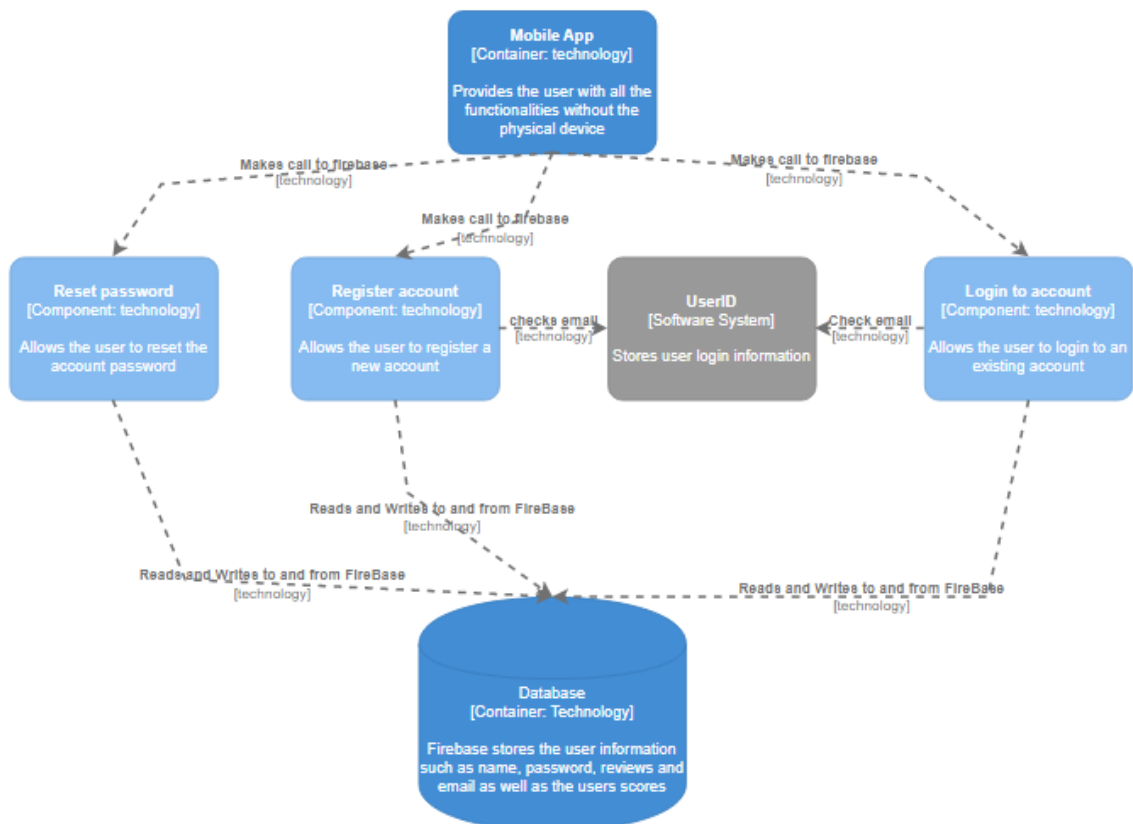
## Sprint Retrospective

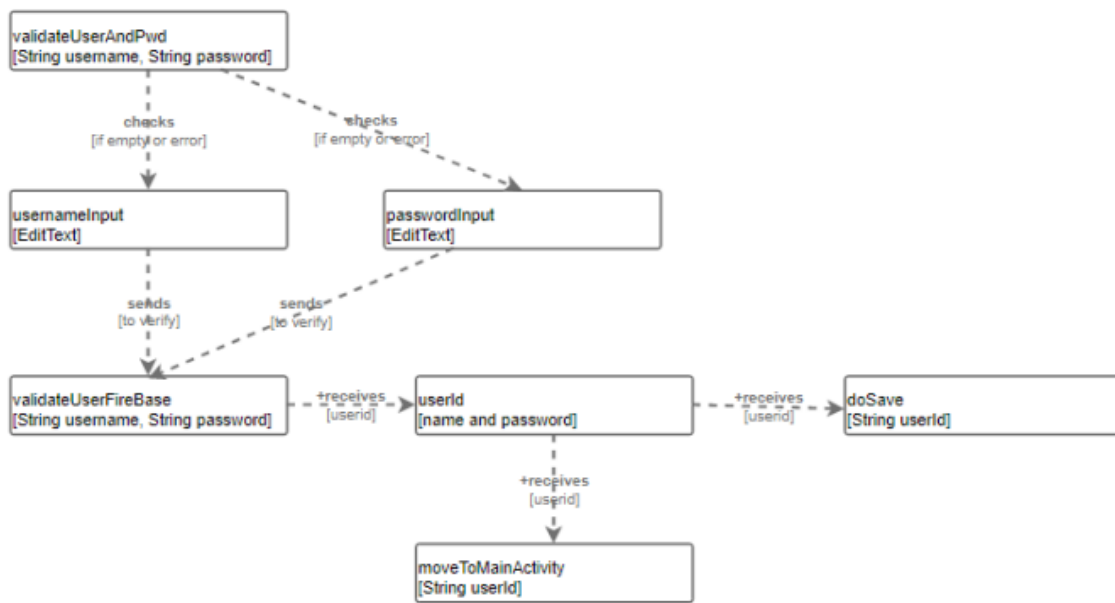
*Nika*



## System Context Diagram (C4 Model)







# **Design**

## **Principles**

In our app we used two different design principles in order to make it more professional and overall better results. These principles are KISS(Keep it Simple and Stupid) and Single Responsibility. We utilized KISS as we are in a group of four and keeping everything as simple as possible makes it so we can work on coding that someone else started without being too confused about what they are trying to accomplish and what they have done so far. We also used Single Responsibility to keep everything organized. This is clearly displayed through our login/register pages, as we split it among multiple screens and fragments rather than having it all be in one giant fragment.

## **Design Patterns**

In our app we used two different design patterns to add a natural flow and overall structure to our design. The two patterns we used were command design patterns and creational patterns for the builder, in which we had an alert dialog that gave the user some text along with a title, message, and option to click OK for example. We also made use of the command design pattern.

## **Coding Work Progress**

### **Runtime Permission**

```
<uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.BLUETOOTH" />
<uses-permission android:name="android.permission.BLUETOOTH_ADMIN" />
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION"/>
<uses-permission android:name="android.permission.BLUETOOTH_ADVERTISE" />
<uses-permission android:name="android.permission.BLUETOOTH_CONNECT" />
<uses-permission android:name="android.permission.BLUETOOTH_SCAN" />
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.CAMERA" />
```

### **Additional features/functionality added**

Since Deliverable 2, the app has immensely changed. Additional features added since are listed below. We added FireBase implementation to our app, which gave us the ability to store and read information through a database. New fragments and classes such as Joystick, Bluetooth, and Review have been added since. New animations on the login screen along with the profile screen give additional depth and immersion. Additional features such as runtime permissions, notifications, saving login info, and google sign-in have all been implemented.

- Firebase Database
- Virtual Joystick configuration
- Bluetooth Connectivity
- Customer Review/Feedback
- Animations and GIFs
- Google Sign-in
- Shared Preferences
- New Fragments and Classes
- French Translations Updated



## Customer Review Screen Storage

### GEAR1

overall: "100.0%"  
userComment: "I enjoy this game while sipping my pina colada at the beach. This app is bueno suave! ahb boujourno!!!"  
userEmail: "francesco@suave.com"  
userModel: "Android SDK built for x86"  
userName: "Francesco"  
userPhone: "555-555-555"

### GEAR2

overall: "100.0%"  
userComment: "vry nice"  
userModel: "Android SDK built for x86"  
userName: "Bikram"

### adminGEAR1

overall: "100.0%"  
userComment: "doo bee doo da doo bee doo da"  
userEmail: "Tri\_stateArea@gmail.com"  
userModel: "sdk\_gphone\_x86"  
userName: "Agent P"

### adminGEAR2

overall: "100.0%"  
userComment: "I LOVE IT!!!! SO MUCH FUN!!!"  
userEmail: "FranSan\_tos@hotmail.com"  
userModel: "sdk\_gphone\_x86"  
userName: "SantosMan"  
userPhone: "6476473130"

### adminGEAR7

overall: "100.0%"  
userComment: "good app :)"  
userEmail: "ralph@gmail.com"  
userModel: "sdk\_gphone\_x86"  
userName: "Ralph Robes"